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Jeffrey Scott Eder

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ASSET TRUST, INC.  
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SUITE 7362  
BOTHELL, WA 98021

EXAMINER

CHENCINSKI, SIEGFRIED E

ART UNIT

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/761,670	<b>Applicant(s)</b> EDER, JEFFREY SCOTT	
	<b>Examiner</b> SIEGFRIED E. CHENCINSKI	<b>Art Unit</b> 3695	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 11 March 2012.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 89-132 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 89-132 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/27/11, 1/10/12, 3/11/12</u> | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Status of Claims*

1. Claims 89-132 are pending.

Claims 89, 97, 98, 106, 114, 115, 121 and 127 are newly amended.

Claims 89-97 and 127-132 are rejected under 35 USC 101.

Claims 89 – 132 are rejected under 35 USC 112 first and second paragraphs

Claims 89-132 are rejected under 35 USC 103(a).

### *Claim Rejections - 35 USC § 101*

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. **Claims 89-97 and 127-132 are rejected under 35 U.S.C. 101** because the claimed invention is directed to non-statutory subject matter.

The interim guidelines issued in July 27, 2010 USPTO Deputy Commissioner Robert Bahr regarding 35 USC 101 include the following in Factors Weighing Against Eligibility. These guidelines include the following factors weighing against Eligibility:

Under Insufficient Recitation of a machine or Transformation:

- A machine is merely nominally related to the performance of the process.
- Machine is generically recited such that it covers any machine capable of performing the claimed step(s).
- A machine is merely an object on which the method operates.

Based upon consideration of all the relevant factors with respect to the claim as a whole, claims 89 and 127 are held to claim an abstract idea, and are therefore rejected as ineligible subject matter under 35 USC 101. The rationale for this finding is explained below.

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Independent claims 89 and 127 recite a process comprising the step of using.

Dependent claims 90-97 and 128-132 are rejected because of their dependence on independent claims 89 and 127.

Based on Supreme Court precedent, one of the tests for a proper process is for the process to be tied to another statutory class or transform underlying subject matter to a different state or thing (*Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876)). Since neither of these requirements is met by the claim, the method may not be considered a patent eligible process under 35 U.S.C. 101. To qualify as a statutory process, the claim should positively recite the other statutory class to which it is tied, for example by identifying the apparatus that accomplished the method steps or positively reciting the subject matter that is being transformed, for example by identifying the material that is being changed to a different state. Without these elements the invention involves human interaction which is not patentable subject matter.

The machine-or-transformation test is a two-branched inquiry; an applicant may show that a process claim satisfies § 101 either by showing that his claim is tied to a particular machine, or by showing that his claim transforms an article. See Benson, 409 U.S. at 70. Certain considerations are applicable to analysis under either branch. First, as illustrated by Benson and discussed below, the use of a specific machine or transformation of an article must impose meaningful limits on the claim's scope to impart patent-eligibility. See Benson, 409 U.S. at 71-72. Second, the involvement of the machine or transformation in the claimed process must not merely be insignificant extra-solution activity. See Flook, 437 U.S. at 590. (*In re Bilski*, En banc, U.S. Court of Appeals for the Federal Circuit, Washington, DC, Oct. 30, 2008). Per *In re Bilski*, these requirements must be present in each meaningful limitation step and must not merely rely on such limitations in the preamble.

Applicant is referred to the Board of Patent Appeals and Interferences' Informative en banc Opinion *Ex parte Langemyer et al-*  
[http://iplaw.bna.com/iplw/5000/split\\_display.adp?fedfid=10988734&vname=ippqcases2](http://iplaw.bna.com/iplw/5000/split_display.adp?fedfid=10988734&vname=ippqcases2)

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This opinion states that mathematical manipulations of data do not become patent eligible subject matter even when performed on a computer and outputted to a display.

According to the above statutory requirements, at least one significant solution step must contain the statutory component and must show that the machine is used in a significant manner such that human intervention is not involved, since simply a computer or processor could mean a human using a desktop computer to perform all of the linking steps by hand, only optionally using the machine. In other words, the step must include the limitation “computer programmed to perform ....”.

Further, the statutory component must more specifically be an automated programmed electronic computer or programmed computer processor or programmed computer server, since simply a computer could mean a human using a desktop computer to perform all of the linking steps by hand using various tools including a computer to perform all of the claimed tasks. For example, the first limitation containing the statutory component should be stated as “computing through the use of an automated programmed electronic computer system for one or more ...”. Then, if the claimed invention is in fact a computer automated process, each additional step could be written as “computing by the computer ... or “performing by the computer ...”. Otherwise a human could still be using a computer to perform any steps which simply claim a “computer system”.

If there were insignificant solution steps such as receiving of data, each such step could optionally be stated as “by the computer system ...” if they come after the first step conducted by an automated programmed computer or equivalent. It is unclear to the examiner whether Applicant’s disclosure supports the needed statutory components since a human figure is included in the drawings.

Applicant may have support for overcoming this rejection. If so. Applicant needs to point the location of the needed support in the response to this office action.

**3. Claims 89-97 and 127-132 are rejected** under 35 U.S.C. 101 because the

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claimed recitation of a use in independent claims 89 and 127 without setting forth more than one step in the process results in an improper definition of a process, i.e., a single step in a claim is not a proper process claim under 35 U.S.C. 101 because a process required at least two steps. This is caused in Applicant's claims 89 and 127 by stating the limitation "at least one of the steps of:" See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966). Claims 90-97 and 128-132 are rejected because of their dependence on independent claim 89.

**4. Claims 89-132 are rejected under 35 U.S.C. 101** because the claimed invention is directed to non-statutory subject matter. The result of generate and output a list in independent claims 89, 98, 106, 115, 121 and 127 is abstract according to the above guidelines. Dependent claims 90-97, 99-105, 107-114, 115-120 and 128-132 are rejected because of their dependence on rejected independent claims 89, 98, 106, 115, 121 and 127.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

**5. Claims 89-97 are rejected** under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement.

a) Independent claims 89 and 127 fail the enablement requirement because they require only a single step. *In re Hyatt*, 708 F.2d 712, 218 USPQ 195 (Fed. Cir. 1983) to the effect that a single means claim does not comply with the enablement requirement of 35 U.S.C. 112, first paragraph.

b) The optionality of performing more than one step in independent claims 89 and 127 creates additional indefiniteness since it is not known which steps to choose and how

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the one or more steps will enable the ordinary practitioner to reach a solution without unreasonable experimentation.

Claims 90-97 and 128-132 are rejected because of their dependence on rejected independent claims 89 and 127.

Correction is required.

**6. Claims 89-114 are rejected under 35 U.S.C. 112, first paragraph**, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. For an application in this case, see the rejections under 35 USC 101.

Correction is required.

**7. Claims 89-132 are rejected under 35 U.S.C. 112, first paragraph**, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. For example, the expression "vendor mix" in claims 89, 97, 98, 106, 114 is not contained in the specification. Neither is there support for the claimed limitations in the independent claims, with claim 89 as exemplary:

"compute a vendor mix from prior purchases, future commitments, and a forecast inventory depletion for each period of a forecast planning period based on one or more scenarios for an item demand, an item price, an item availability and a specified service level for each of a plurality of items; and compute one or more variables for each item based upon the computed vendor mix."

Correction is required.

**8. Claims 89-114 are rejected under 35 U.S.C. 112, first paragraph**, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to

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one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The newly added limitations of item longevity forecasts and inventory depletion forecasts are new matter since they are not supported by the original disclosure such as the specification.

Correction is required.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**9. Claims 89-132 are rejected under 35 U.S.C. 112, second paragraph.**

Independent claims 89, 98, 106, 115, 121 and 127 provide for the use of a processor to perform calculations, but, since the claims do not set forth proper action steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps which establish how this method is actually practiced. The optionality of performing more than one step creates additional indefiniteness since it is not known which steps to choose and how the one or more steps will enable the ordinary practitioner to reach a solution without unreasonable experimentation.

Dependent claims 90-97, 99-105 and 107-114, 116-120, 122-126 and 128-132 are rejected because of their dependence on rejected independent claims 89, 98, 106, 115, 121 and 127.

Correction is required.

**10. Claims 89-97 and 127-132 are rejected under 35 U.S.C. 112, second paragraph** as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention because of failing to include the necessary action verbs required in a process or method. Re. independent method claims 89 and 127, each step in a method, optional or required, must present the active verb in the "verb+ing" format in order to present the limitation in an active verb format.



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Applicant can remedy this aspect of the rejections by converting words such as “compute” into the action verb+ing format of computing, and so forth.

Dependent claims 90-97 and 128-132 are rejected because of their dependence on rejected independent claims 89 and 127.

Correction is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**11. Claims 89, 90, 94, 96 & 97 are rejected** under 35 U.S.C. 103(a) as being unpatentable over Rush et al. (US 6,119,102, hereafter Rush) in view of Dietrich et al. (US Patent 5,630,070, hereafter Dietrich).

#### **BACKGROUND INFORMATION:**

Material Resource Systems (MRP's) became sophisticated with the growth and development of computer systems applications in business in the 1970's and 1980's. Computer Associates' ASK MANMAN system dominated in the 1980's into the early 1990's. SAP, Baan and others began to dominate in the mid- 1990's with very sophisticated systems. These systems integrate demand forecasts with manufacturing requirements, inventories, suppliers and accounting and accounts receivable and payable. Supply chain systems capabilities expanded these capabilities in approx. 1998 – 2000 when XML application overcame the communications challenge between disparate software systems. The XML application actually was solved in approx. the mid 1980's by IBM. Further, these techniques are taught to buyers, purchasing personnel and manufacturing personnel and related business administration students throughout the school systems of the USA.

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**Re. claim 89**, Rush discloses a profit management method implemented by a computer including a processor, comprising:

using the processor to:

- obtain a plurality of item data that comprises one or more prior purchases (Col. 19, l. 17 – Bottom right in Table), one or more future commitments (Col. 3, l. 10), one or more future commitments (Col. 3, l. 10), an item price (Col. 4, l. 50), one or more item availability forecasts (Manuf. Lead time - Col. 4, ll. 13-15. The ordinary practitioner would have seen it as obvious that this suggest item availability), and a plurality of inventory depletion forecasts (Col. 16, ll. 2-13).

Rush does not explicitly disclose longevity forecasts. However, Dietrich discloses End-of-Life Inventory Optimization which would have been seen by the ordinary practitioner as implicitly requiring longevity forecasts.

Therefore, the ordinary practitioner of the art would have seen it as obvious to have combined the disclosures of the techniques of Rush and Dietrich with his own knowledge in order to develop a purchasing risk management method, storage medium and system implemented by a computer including a processor, motivated by a desire to provide a manufacturing requirements planning ("MRP") (Rush, col. 1, ll. 9-10).

**Re. claim 90**, Rush discloses wherein the list of actions comprise a set of item quantities that should be purchased from each of one or more vendors (Purchases - Col. 3, ll. 15-25; Vendor - Col. 19, l. 17).

**Re. claim 94**, Rush discloses the use of one or more variables which comprise one or more metrics (Col. 18, ll. 15-66 – all of these variables are metrics a understood by an ordinary practitioner at the time of Applicant's invention.).

**Re. claim 96**, Rush discloses wherein the variable has a utility in developing a composite forecast (Col. 6, l. 66 – Col. 7, l. 5).

**Re. claim 97**, Rush discloses wherein the method further comprises preparing a plurality of data related to a commercial enterprise for use in analysis, identifying a set of data required for analyzing the commercial enterprise from the prepared data, analyzing the set of data in an automated fashion as required to identify one or more statistics, and using the statistics and the set of data to develop a model of an

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enterprise current operation financial performance using one or more automated learning techniques where the commercial enterprise physically exists, and where the set of data comprises the one or more variables computed for each item based upon the computed vendor mix (Abstract; Col. 1, l. 62 - Col. 2, l. 5. Rush's MRP system has all of these characteristics).

**12. Claim 91 is rejected** under 35 U.S.C. 103(a) as being unpatentable over Rush in view of Dietrich as applied to the rejections of claim 89 above, and further in view of Towers (US Patent 4,566,066).

**Re. claim 91**, none of Rush or Dietrich explicitly disclose wherein the list of actions comprise a set of item quantities that should be purchased from each of one or more vendors for a given set of discount schedules. However, Towers discloses the use of discount schedules in the purchase/sale transaction process. (Col. 49, l. 11). Therefore, the ordinary practitioner of the art would have seen it as obvious to have combined the disclosures of the techniques of Rush, Dietrich and Towers with his own knowledge in order to develop a purchasing risk management method, storage medium and system implemented by a computer including a processor, motivated by a desire to provide a manufacturing requirements planning ('MRP") (Rush, col. 1, ll. 9-10).

**13. Claim 92 is rejected** under 35 U.S.C. 103(a) as being unpatentable over Rush in view of Dietrich as applied to the rejections of claim 89 above, and further in view of Reboh et al. (US Patent 4,866,634, hereafter Reboh) and Alvin (US Patent 7,139,731 B1).

**Re. claim 92**, none of Rush or Dietrich explicitly disclose wherein one or more variables comprise an item obsolescence variable. However, Reboh discloses financial risk assessment and the deletion of obsolete instances of variables (financial risk – Col. 2, ll. 16-17; obsolescence variables – Fig. 18 – item 182, Col. 18, l. 49). Further, Alvin discloses the financial risks of inventory which may quickly become obsolete (Col. 1, ll. 30-31; Col. 3, l. 14). Therefore, the ordinary practitioner of the art would have seen it as obvious to have combined the disclosures of the techniques of Rush, Dietrich and Alvin

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with his own knowledge in order to develop a purchasing risk management method, storage medium and system implemented by a computer including a processor, motivated by a desire to provide a manufacturing requirements planning ("MRP") (Rush, col. 1, ll. 9-10).

**14. Claim 93 is rejected** under 35 U.S.C. 103(a) as being unpatentable over Rush in view of Dietrich as applied to the rejections of claim 89 above, and further in view of Reboh, Alvin and Sandretto (US Patent 5,812,988).

**Claim 93**, Rush discloses or suggests wherein the one or more variables comprise a variable that combines an item trend variable (based on the demand forecast (Col. 6, ll. 66-67) and an item demand variability variable (in the MRP system which tracks item demand variability through the demand history file). None of Rush or Dietrich explicitly disclose an item obsolescence risk variable. However, Reboh discloses financial risk assessment and the deletion of obsolete instances of variables (financial risk – Col. 2, ll. 16-17; obsolescence variables – Fig. 18 – item 182, Col. 18, l. 49). Further, Alvin discloses the financial risks of inventory which may quickly become obsolete (Col. 1, ll. 30-31; Col. 3, l. 14). Sandretto discloses the technique of quantity variability risk measure. The ordinary practitioner would have found it obvious to apply the same variability risk measure to measure item obsolescence risk. Therefore, the ordinary practitioner of the art would have seen it as obvious to have combined the disclosures of the techniques of Rush, Dietrich and Sandretto with his own knowledge in order to develop a purchasing risk management method, storage medium and system implemented by a computer including a processor, motivated by a desire to provide a manufacturing requirements planning ("MRP") (Rush, col. 1, ll. 9-10).

**15. Claim 95 is rejected** under 35 U.S.C. 103(a) as being unpatentable over Rush in view of Dietrich as applied to the rejections of claim 89 above, and further in view of Shepherd (US Patent 6,134,536).

**Re. claim 95**, none of Rush or Dietrich explicitly disclose a variable that combines a normalized item trend variable, a normalized item demand variability variable and a

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normalized item obsolescence risk variable where the scale of the item risk variable is reversed. However, Shepherd discloses the use of the technique of normalizing one or more variables (Col. 14, l. 31). Combining variables is disclosed by Rush (Col. 6, ll. 66-67). Reversing the scale of a variable is a design choice per the US Supreme Court's decision known as KSR which makes design choice one of the non-factual reasons for finding obviousness. How a scale is presented does not change the content or the message. Therefore, the ordinary practitioner of the art would have seen it as obvious to have combined the disclosures of the techniques of Rush, Dietrich and Shepherd with his own knowledge in order to develop a purchasing risk management method, storage medium and system implemented by a computer including a processor, motivated by a desire to provide a manufacturing requirements planning ('MRP") (Rush, col. 1, ll. 9-10).

**16. Claims 98-114 are rejected** under 35 U.S.C. 103(a) as being unpatentable over Rush et al. (US 6,119,102, hereafter Rush) in view of Dietrich, Sandretto, Barr et al. (US Patent 5,761,442, hereafter Barr), Skeen et al. (US Patent 5,557,798, hereafter Skeen), Gell et al. (US Patent 5,802,502).

#### BACKGROUND INFORMATION:

Material Resource Systems (MRP's) became sophisticated with the growth and development of computer systems applications in business in the 1970's and 1980's. Computer Associates' ASK MANMAN system dominated in the 1980's into the early 1990's. SAP, Baan and others began to dominate in the mid- 1990's with very sophisticated systems. These systems integrate demand forecasts with manufacturing requirements, inventories, suppliers and accounting and accounts receivable and payable. Supply chain systems capabilities expanded these capabilities in approx. 1998 – 2000 when XML application overcame the communications challenge between disparate software systems. The XML application actually was solved in approx. the mid 1980's by IBM. Further, these techniques are taught to buyers, purchasing personnel and manufacturing personnel and related business administration students throughout the school systems of the USA.

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**Re. claims 97 & 106,** Rush discloses a profit management storage medium and system implemented by a computer including a processor, with system claim 106 as exemplary, comprising:

using the processor to:

- obtain a plurality of item data that comprises one or more prior purchases (Col. 19, l. 17 – Bottom right in Table), one or more future commitments (Col. 3, l. 10), one or more future commitments (Col. 3, l. 10), an item price (Col. 4, l. 50), one or more item availability forecasts (Manuf. Lead time - Col. 4, ll. 13-15. The ordinary practitioner would have seen it as obvious that this suggest item availability), and a plurality of inventory depletion forecasts (Col. 16, ll. 2-13).

Rush does not explicitly disclose longevity forecasts. However, Dietrich discloses End-of-Life Inventory Optimization which would have been seen by the ordinary practitioner as implicitly requiring longevity forecasts.

Rush discloses computing a forecast of a demand for each of a plurality of items for each period of a forecast planning period based on the item volume data (Col. 3, ll. 54-57);

Rush discloses the computing of variables (Fog. 4; Col. 2, ll. 17-18).

Rush does not explicitly disclose:

- use of a quantity variability risk measure.
- Developing a linear model of an organization profit;
- performing an optimization calculation using the organization profit model where said calculation comprises the controlling forecast, and
- generate and output a list of actions that will maximize a business profitability using the results of said organization calculation for the controlling forecast.

However, Sandretto discloses use of a quantity variability risk measure (Col. 11, ll. 63-64) and a linear model of an organization profit (Col. 4, ll. 57-65. Modeling the profit prospects of a stock is modeling the profitability outlook for an organization since a stock represents the value of an organization, a company owned by stockholders.).

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Barr discloses optimization calculations regarding risk factors that incorporates one or more item demand forecasts based on one or more variables (Col. 4, l. 66 – Col. 5, l. 9).

The ordinary practitioner would have seen it as obvious that the controlling forecast would be the object of such calculations just on a common sense basis.

Skeen discloses generating an output of a list of actions (Col. 58, ll. 53-54).

Gell discloses maximizing of profit through a programmed computer process (Col. 11, ll. 3, 28).

Therefore, the ordinary practitioner of the art would have seen it as obvious to have combined the disclosures of the techniques of Rush, Dietrich, Sandretto, Barr, Skeen and Gell with his own knowledge in order to develop a purchasing risk management storage medium and system implemented by a computer including a processor, motivated by a desire to provide a manufacturing requirements planning ("MRP") (Rush, col. 1, ll. 9-10).

Therefore, the ordinary practitioner of the art would have seen it as obvious to have combined the disclosures of the techniques of Rush, Dietrich, Sandretto, Barr, Skeen and Gell with his own knowledge in order to develop a purchasing risk management method, storage medium and system implemented by a computer including a processor, motivated by a desire to provide a manufacturing requirements planning ("MRP") (Rush, col. 1, ll. 9-10).

**Re. claims 99 & 107**, Rush discloses wherein the list of actions comprise a set of item quantities that should be purchased from each of one or more vendors (Purchases - Col. 3, ll. 15-25; Vendor - Col. 19, l. 17).

**Re. claims 103 & 111**, Rush discloses the use of one or more variables which comprise one or more metrics (Col. 18, ll. 15-66 – all of these variables are metrics as understood by an ordinary practitioner at the time of Applicant's invention.).

**Re. claims 105 & 113**, Rush discloses wherein the variable has a utility in developing a composite forecast (Col. 6, l. 66 – Col. 7, l. 5).

**Re. claims 97 & 114**, Rush discloses wherein the method further comprises preparing a plurality of data related to a commercial enterprise for use in analysis, identifying a set of data required for analyzing the commercial enterprise from the prepared data,

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analyzing the set of data in an automated fashion as required to identify one or more statistics, and using the statistics and the set of data to develop a model of an enterprise current operation financial performance using one or more automated learning techniques where the commercial enterprise physically exists, and where the set of data comprises the one or more variables computed for each item based upon the computed vendor mix (Abstract; Col. 1, l. 62 - Col. 2, l. 5. Rush's MRP system has all of these characteristics).

**17. Claims 100 & 108 are rejected** under 35 U.S.C. 103(a) as being unpatentable over Rush in view of Dietrich, Sandretto, Barr, Skeen and Gell as applied to the rejections of claims 98 and 106 above, and further in view of Towers (US Patent 4,566,066).

**Re. claims 100 & 108**, none of Rush, Dietrich, Sandretto, Barr, Skeen and Gell explicitly disclose wherein the list of actions comprise a set of item quantities that should be purchased from each of one or more vendors for a given set of discount schedules. However, Towers discloses the use of discount schedules in the purchase/sale transaction process. (Col. 49, l. 11). Therefore, the ordinary practitioner of the art would have seen it as obvious to have combined the disclosures of the techniques of Rush, Dietrich, Sandretto, Barr, Skeen, Gell and Towers with his own knowledge in order to develop a purchasing risk management method, storage medium and system implemented by a computer including a processor, motivated by a desire to provide a manufacturing requirements planning ("MRP") (Rush, col. 1, ll. 9-10).

**18. Claims 101, 102, 109 & 110 are rejected** under 35 U.S.C. 103(a) as being unpatentable over Rush in view of Dietrich, Sandretto, Barr, Skeen and Gell as applied to the rejections of claims 89, 98 and 106 above, and further in view of Reboh et al. (US Patent 4,866,634) and Alvin (US Patent 7,139,731 B1).

**Re. claims 101 & 109**, none of Rush, Dietrich, Sandretto, Barr, Skeen and Gell explicitly disclose wherein one or more variables comprise an item obsolescence variable. However, Reboh discloses financial risk assessment and the deletion of



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obsolete instances of variables (financial risk – Col. 2, ll. 16-17; obsolescence variables – Fig. 18 – item 182, Col. 18, l. 49). Further, Alvin discloses the financial risks of inventory which may quickly become obsolete (Col. 1, ll. 30-31; Col. 3, l. 14). Therefore, the ordinary practitioner of the art would have seen it as obvious to have combined the disclosures of the techniques of Rush, Dietrich, Sandretto, Barr, Skeen, Reboh and Alvin with his own knowledge in order to develop a purchasing risk management method, storage medium and system implemented by a computer including a processor, motivated by a desire to provide a manufacturing requirements planning (“MRP”) (Rush, col. 1, ll. 9-10).

**Claims 102 & 110**, Rush discloses or suggests wherein the one or more variables comprise a variable that combines an item trend variable (based on the demand forecast (Col. 6, ll. 66-67) and an item demand variability variable (in the MRP system which tracks item demand variability through the demand history file). None of Rush, Sandretto, Barr, Skeen and Gell explicitly disclose an item obsolescence risk variable. However, Reboh discloses financial risk assessment and the deletion of obsolete instances of variables (financial risk – Col. 2, ll. 16-17; obsolescence variables – Fig. 18 – item 182, Col. 18, l. 49). Further, Alvin discloses the financial risks of inventory which may quickly become obsolete (Col. 1, ll. 30-31; Col. 3, l. 14). Sandretto discloses the technique of quantity variability risk measure. The ordinary practitioner would have found it obvious to apply the same variability risk measure to measure item obsolescence risk. Therefore, the ordinary practitioner of the art would have seen it as obvious to have combined the disclosures of the techniques of Rush, Sandretto, Barr, Skeen, Gell, Reboh and Alvin with his own knowledge in order to develop a purchasing risk management method, storage medium and system implemented by a computer including a processor, motivated by a desire to provide a manufacturing requirements planning (“MRP”) (Rush, col. 1, ll. 9-10).

**19. Claims 104 & 112 are rejected** under 35 U.S.C. 103(a) as being unpatentable over Rush in view of Dietrich, Sandretto, Barr, Skeen and Gell as applied to the rejections of claims 89, 98 and 106 above, and further in view of Shepherd (US Patent

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6,134,536).

**Re. claims 104 & 112**, none of Rush, Dietrich, Sandretto, Barr, Skeen and Gell explicitly disclose a variable that combines a normalized item trend variable, a normalized item

demand variability variable and a normalized item obsolescence risk variable where the scale of the item risk variable is reversed. However, Shepherd discloses the use of the technique of normalizing one or more variables (Col. 14, l. 31). Combining variables is disclosed by Rush (Col. 6, ll. 66-67). Reversing the scale of a variable is a design choice per the US Supreme Court's decision known as KSR which makes design choice one of the non-factual reasons for finding obviousness. How a scale is presented does not change the content or the message. Therefore, the ordinary practitioner of the art would have seen it as obvious to have combined the disclosures of the techniques of Rush, Dietrich, Sandretto, Barr, Skeen and Shepherd with his own knowledge in order to develop a purchasing risk management method, storage medium and system implemented by a computer including a processor, motivated by a desire to provide a manufacturing requirements planning ('MRP') (Rush, col. 1, ll. 9-10).

**20. Claims 115-132 are rejected** under 35 U.S.C. 103(a) as being unpatentable over Rush, Dietrich, Sandretto, Barr, Skeen and Gell and Adams et al. (US Patent 7117165 B1, hereafter Adams)..

**Re. Claims 115, 121 and 127**, the disclosures of Rush, Dietrich, Sandretto, Barr, Skeen and Gell are cited above in the rejection of claims 89-114.

As stated in the rejections under 35 USC 112-2<sup>nd</sup> paragraph, for purposes of examination the examiner is treating the word "advanced" in the preambles of claims 115, 121 and 126 as hyperbole, with no patentable weight.

None of Rush, Dietrich, Sandretto, Barr, Skeen and Gell explicitly disclose

- generating at least one set of optimal purchasing requisitions for said items; and
- manage a supply chain risk based on said set of requisitions.

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However, Adams discloses the creation of purchasing requisitions as part of a strategic supply chain process (purchasing requisitions- Abstract-requisitions; p. 2, right column – l. 9; Col. 21, l. 27. Supply chain management – Col. 1, ll. 58-59.).

Therefore, the ordinary practitioner of the art would have seen it as obvious to have combined the disclosures of the techniques of Rush, Dietrich, Sandretto, Barr, Skeen, Gell and Adams with his own knowledge in order to develop an advanced purchasing risk management method, storage medium and system implemented by a computer including a processor, motivated by a desire to provide a manufacturing requirements planning (“MRP”) (Rush, Col. 1, ll. 9-10).

**Claims 116, 122 & 128**, Rush does not disclose maximizing of profit through a programmed computer process. However, Gell discloses maximizing of profit through a programmed computer process (Col. 11, ll. 3, 28).

**Claims 118, 124 & 130**, Rush discloses the use of one or more variables which comprise one or more metrics (Col. 18, ll. 15-66 – all of these variables are metrics as understood by an ordinary practitioner at the time of Applicant’s invention.).

**Claims 120, 126 & 132**, Rush discloses wherein the variable has a utility in developing a composite forecast (Col. 6, l. 66 – Col. 7, l. 5).

**21. Claims 95, 104 & 112 are rejected** under 35 U.S.C. 103(a) as being unpatentable over Rush in view of Dietrich, Sandretto, Barr, Skeen, Gell and Adams as applied to the rejections of claims 115, 121 and 127 above, and further in view of Shepherd (US Patent 6,134,536).

**Claims 119, 125 & 131**, wherein the one or more risk measures comprise a variable that combines a normalized quantity trend measure, a normalized quantity variability measure and a normalized obsolescence time measure.

None of Rush, Dietrich, Sandretto, Barr, Skeen, Gell or Adams explicitly disclose a variable that combines a normalized item trend variable, a normalized item demand variability variable and a normalized item obsolescence risk variable where the scale of the item risk variable is reversed. However, Shepherd discloses the use of the technique of normalizing one or more variables (Col. 14, l. 31). Combining variables is

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disclosed by Rush (Col. 6, ll. 66-67). Reversing the scale of a variable is a design choice per the US Supreme Court's decision known as KSR which makes design choice one of the non-factual reasons for finding obviousness. How a scale is presented does not change the content or the message. Therefore, the ordinary practitioner of the art would have seen it as obvious to have combined the disclosures of the techniques of Rush, Dietrich, Sandretto, Barr, Skeen, Gell, Adams and Shepherd with his own knowledge in order to develop a purchasing risk management method, storage medium and system implemented by a computer including a processor, motivated by a desire to provide a manufacturing requirements planning ("MRP") (Rush, col. 1, ll. 9-10).

**22. Claims 117, 123 & 129 are rejected** under 35 U.S.C. 103(a) as being unpatentable over Rush in view of Dietrich, Sandretto, Barr, Skeen, Gell and Adams as applied to the rejections of claims 115, 121 and 127 above, and further in view of Reboh et al. (US Patent 4,866,634) and Alvin (US Patent 7,139,731 B1).

**Claims 117, 123 & 129**, Rush discloses or suggests wherein the one or more variables comprise a variable that combines an item trend variable (based on the demand forecast (Col. 6, ll. 66-67) and an item demand variability variable (in the MRP system which tracks item demand variability through the demand history file). None of Rush, Dietrich, Sandretto, Barr, Skeen, Gell or Adams explicitly disclose an item obsolescence risk variable.

However, Reboh discloses financial risk assessment and the deletion of obsolete instances of variables (financial risk – Col. 2, ll. 16-17; obsolescence variables – Fig. 18 – item 182, Col. 18, l. 49). Further, Alvin discloses the financial risks of inventory which may quickly become obsolete (Col. 1, ll. 30-31; Col. 3, l. 14). Sandretto discloses the technique of quantity variability risk measure. The ordinary practitioner would have found it obvious to apply the same variability risk measure to measure item obsolescence risk. Therefore, the ordinary practitioner of the art would have seen it as obvious to have combined the disclosures of the techniques of Rush, Dietrich, Sandretto, Barr, Skeen, Gell, Adams, Reboh and Alvin with his own knowledge in order to develop a purchasing risk management method, storage medium and system

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implemented by a computer including a processor, motivated by a desire to provide a manufacturing requirements planning ('MRP") (Rush, col. 1, ll. 9-10).

### ***Response to Arguments***

**23.** Applicant's arguments filed on March 11, 2012 regarding claims 89 – 132 have been fully considered but they are moot in view of the new grounds of rejection.

### ***Conclusion***

**24.** Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Siegfried Chencinski whose telephone number is (571)272-6792. The Examiner can normally be reached Monday through Friday, 9am to 6pm.

If attempts to reach the Examiner by telephone are unsuccessful, the examiner's supervisor, Charles Kyle, can be reached on (571) 272-6746.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any response to this action should be mailed to:

*Commissioner of Patents and Trademarks, Washington D.C. 20231*

or (571)273-8300 [Official communications; including After Final communications labeled "Box AF"]

(571) 273-6792 [Informal/Draft communications, labeled "PROPOSED" or "DRAFT"]

Hand delivered responses should be brought to the address found on the above USPTO web site in Alexandria, VA.

/SIEGFRIED E. CHENCINSKI/

Examiner, Art Unit 3695

May 23, 2012